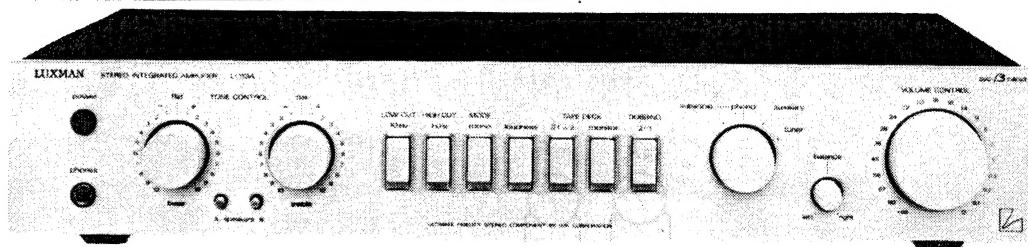


SERVICE MANUAL

LUXMAN SOLID STATE STEREO
INTEGRATED AMPLIFIER **L-113A**



CONTENTS

ALIGNMENT PROCEDURE	1
FRONT VIEW PARTS LIST	2
REAR VIEW PARTS LIST	2
MECHANISM PARTS LIST	2
PB-1324 PARTS LIST	3
PB-1324, PB-1374 PARTS LIST	4
BLOCK DIAGRAMME	4
STANDARD CURVES	5
SPECIFICATIONS	5
SCHEMATIC DIAGRAMME	6

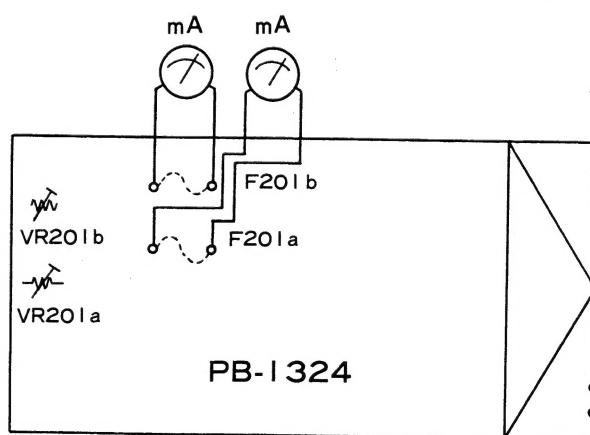
ALIGNMENT PROCEDURE

Set up Unit

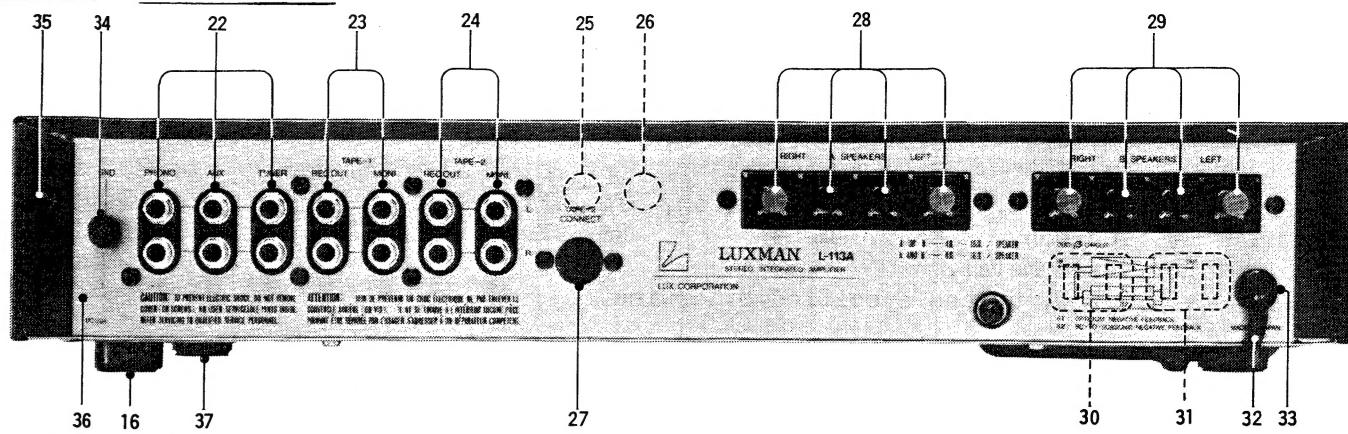
Volume Control
Tone Control
Speaker

Minimum
Center(Flat) Position
"A" Pushed ON Position

1. Turn ON the Power Switch and wait 1 minute for warm up.
2. Bias (Idle Current) Adjustment
 - (1) Take off Fuse F201a,b and connect D.C.Ammeter.
 - (2) Adjust VR201a,b to get 50mA in D.C Ammeter.



REAR VIEW



PARTS LIST(Cosmetic)

SYMBOL NO	STOCK NO	DESCRIPTION	REMARK	SYMBOL NO	STOCK NO	DESCRIPTION	REMARK
Terminal							
22	AT5019	Input 6P. (Phono, Aux, Tuner)		27	AS0205	D.I.N.	
23	AT5018	Input 4P. (Recout 1, Monitor 1)		28	ATO124	Speaker A.(T5730)	
24	AT5018	Input 4P. (Recout 2, Monitor 2)		29	ATO124	Speaker B.(T5730)	
				34	AC0010	G.N.D.	
Power Cord & Bushing							
32	BK0018	UL AC Cord A-18BF	E,U	25		Speaker Protector (R)	U
32	BK0022	AC Cord C-2-461-B	S	26		Speaker Protector (L)	U
33	BU0033	Bushing SR-4N-4		30	AC0010	AC Outlet (Unswitched)	E
				31	AC0010	AC Outlet (Switched)	E
Bonnet							
35	UG1027	Bonnet 1027		Rear Panel			
Bottom Plate				* 36	UC1204	Rear Panel 1204	S
37	UEL105	Bottom Plate 1105		* 36	UC1205	Rear Panel 1205	E,U

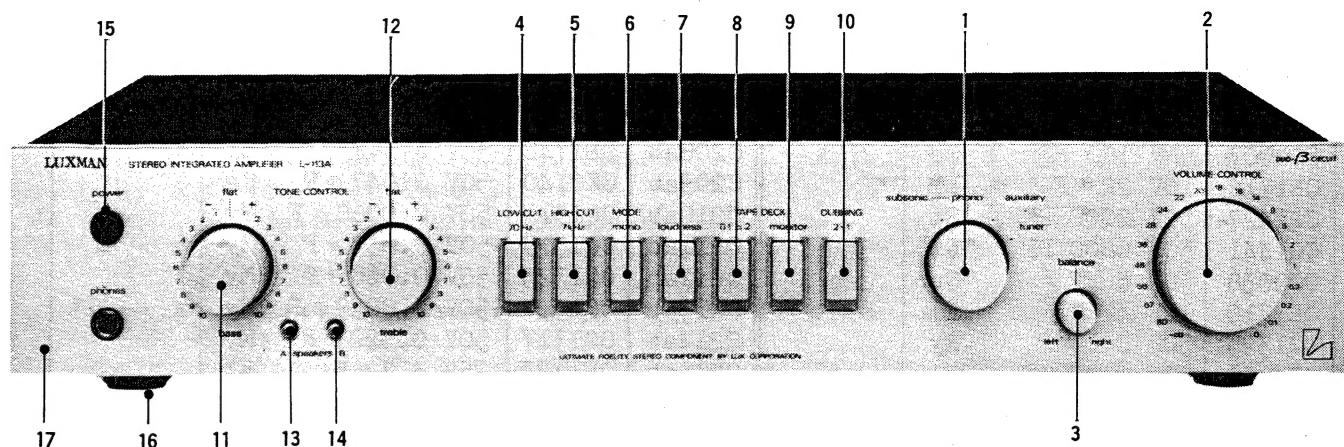
MECHANISM

Variable Resistor				Transistor			
VR001	RV0260	250K,CX2,Blance Cont.		Q206ab	TR0323	2SC-1845	
VR002	RV0259	50K,CX2,Treble Cont.		Q209ab	TR0330	2SC-2577(or 25A1135)	
VR003	RV0259	50K,CX2,Bass Cont.		Q210ab	TR0329	2SA-1102(or 25C2665)	
VR101	RV0279	200K,AX2,Volume Cont.		Fuse holder,Jack & Heat sink			
Switch				*F001	AH0019	1P Fuse holder	S
S001	SP0167	Push. (Power)				XN-1153	
S101	SR0143	R-Slide (Input Selector)		*F001	AH0016	1P Fuse holder	E
S102~	SP0165	Push. (Monitor,Filter,etc.)		*F001	BF0304	XN-1157	
S108				*F001	BF0120	Fuse.MF51NR-2A	S
S401ab	SP0193	Push. (Speaker)		*F301	BF0308	Fuse.MF60NR-3.5A	E
S402ab				*F301	BF0111	Fuse.MF51NR-0.5A	S
Power Transformer				*F201ab	BF0302	Fuse.MF60NR-0.5A	E
*	PT2557	P-2557	S	*F202ab	BF0118	Fuse.MF51NR-4A	
*	PT2558	P-2558	E	*F201ab	BF0302	Fuse.MF51NR-4A	S
Lamp				*F202ab	BF0118	Fuse.MF60NR-4A	E
Phono	AL0057	Lamp. (Green)			BE1075	Heat Sink 1075	
Subsonic	AL0057	Lamp. (Green)			AJ0014	Head Phone Jack	
Tuner	AL0056	Lamp. (Orange)		Packing Material			
Aux	AL0056	Lamp. (Orange)			XA1300	Carton 1300	
Line Voltage Selector E ONLY					XB1040	Pad 1040	
*	AC0054	Socket M-1615	E		ME0208	Owner's Manual	
*	AC0014	Plug P-2120	E				

U= 120V Only

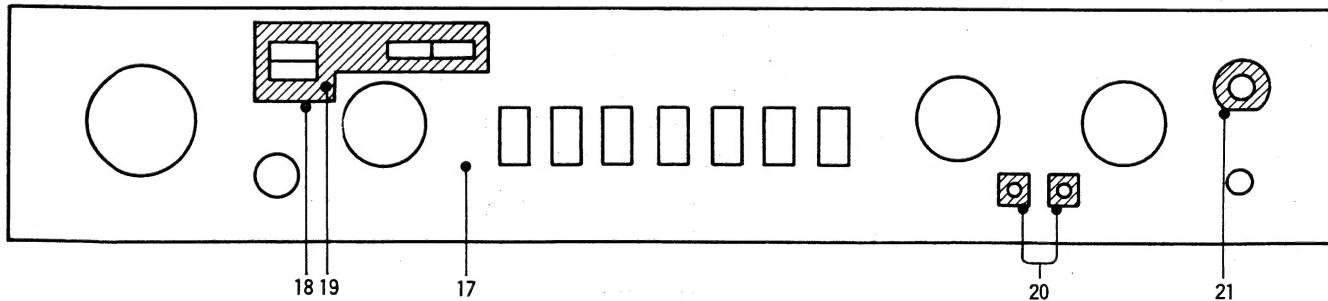
S= 220V on 240V Only

E= 120V (with Line Voltage Selection)

FRONT VIEW

PARTS LIST.....(Cosmetic)

SYMBOL NO	STOCK NO	DESCRIPTION	REMARK	SYMBOL NO	STOCK NO	DESCRIPTION	REMARK
Knob Set							
1	WH1106	Input Selector		9	WJ1142P	Tape Monitor	
2	WH1105	Volume Control		10	WJ1142P	Tape Dubbing	
3	WH1115	Balance Control		11	WH1106	Treble Control	
4	WJ1142P	Low Cut		12	WH1106	Bass Control	
5	WJ1142P	High Cut		13	WJ1145	A Speaker	
6	WJ1142P	Mode Selector		14	WJ1145	B Speaker	
7	WJ1142P	Loudness		15	WJ1133	Power Switch	
8	WJ1142P	Tape Selector		Foot			
				16	WN0007	Foot	



Front Panel A'ssy				Front Panel A'ssy			
17	WA1234	Front Panel		20	WE1095	Protector 1095	Set
18	UW1124	Spacer 1124		21	WE1089	Protector 1089	
19	WE1092	Protector 1092					

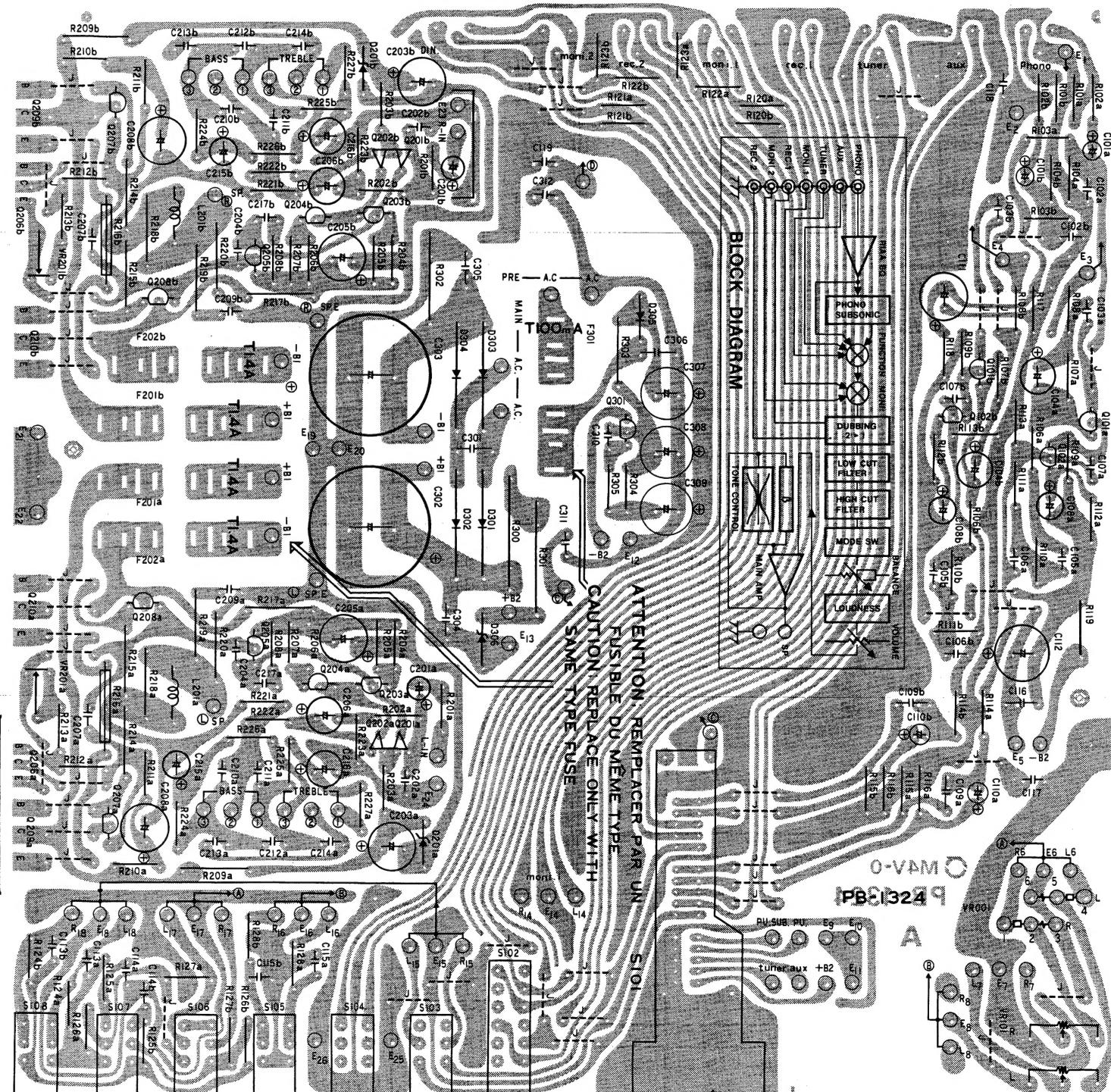
SYMBOL NO	STOCK NO	DESCRIPTION		REMARK	SYMBOL NO	STOCK NO	DESCRIPTION		REMARK
Capacitor					Capacitor				
C101ab	CEO346	50V 3.3 μ F LR	El		C206ab	CE1720	16V 47 μ F	El	
C102ab	CC0005	50V 33 PF	Ce		C207ab	CQ1321	50V 0.047 μ F	My	
C103ab	CC0007	50V 100 PF	Ce		C208ab	CE1742	35V 47 μ F	El	
C104ab	CE1718	16V 22 μ F	El		C209ab	CK0140	50V 0.047 μ F	Ce	
C105ab	CQ1427	50V 2000 PF	St		C210ab	CQ1311	50V 0.0068 μ F	My	
C106ab	CQ1441	50V 6800 PF	St		C211ab	CQ1319	50V 0.033 μ F	My	
C107ab	CC0038	50V 5 PF	Ce		C212ab	CQ1323	50V 0.068 μ F	My	
C108ab	CE1710	10V 47 μ F	El		C213ab	CQ1308	50V 0.0039 μ F	My	
C109ab	CQ1325	50V 0.1 μ F	My		C214ab	CQ1317	50V 0.022 μ F	My	
C110ab	CE4096	50V 0.47 μ F	El		C215ab	CE1727	25V 4.7 μ F	El	
C111	CE1721	16V 100 μ F	El		C216ab	CE1718	16V 22 μ F	El	
C112	CE1758	50V 100 μ F	El		C217ab	CQ1310	50V 0.001 F	My	
C113ab	CQ1320	50V 0.039 μ F	My		C301	CK0203	500V 0.01 μ F	Ce	
C114ab	CQ1308	50V 0.0039 μ F	My		C302	CE1027	50V 6800 μ F	El	
C115ab	CQ1319	50V 0.033 μ F	My		C303	CE1027	50V 6800 μ F	El	
C116	CE1757	50V 47 μ F	El		C304	CQ1420	50V 680 PF	St	
C117	CE1717	16V 10 μ F	El		C305	CQ1420	50V 680 PF	St	
C118	CE1717	16V 10 μ F	El		C306	CK0203	500V 0.01 μ F	Ce	
C119	CK0158	25V 0.047 μ F	Ce		C307	CE1758	50V 100 μ F	El	
C120a	CQ5077	50V 330 PF	St		C308	CE1758	50V 100 μ F	El	
C121	CQ1420	50V 680 PF	St		C309	CE1758	50V 100 μ F	El	
C201ab	CEO346	50V 3.3 μ F LR	El		C310	CC0007	50V 100 PF	Ce	
C202ab	CC0004	50V 22 PF	Ce		C311	CK0158	25V 0.047 μ F	Ce	
C203ab	CE1732	25V 100 μ F	El		C312	CK0158	25V 0.047 μ F	Ce	
C204ab	CC0006	50V 47 PF	Ce		C313	CE1759	50V 220 μ F	El	
C205ab	CE1758	50V 100 μ F	El		Transistor				
Diode					Q101ab	TR0320	2SA-992		
D201ab	TD0065	WZ-192 (Zener)			Q102ab	TR0323	2SC-1845		
D301	TD0105	S3V 20			Q201ab	TR0254	2SA-798		
D302	TD0105	S3V 20			Q203ab	TR0198	2SC-1815		
D303	TD0105	S3V 20			Q204ab	TR0198	2SC-1815		
D304	TD0105	S3V 20			Q205ab	TR0335	2SC-1438-B		
D305	TD0003	IN-4003			Q206ab	TR0323	2SC-1845		
D306	TD0002	IN-4002			Q207ab	TR0311	2SC-2824		
Switch					Q208ab	TR0312	2SA-1184		
S101	SR0143	Rotary Input Selector			Q209ab	TR0330	2SC-2577(or 2SC-2665)		
S102	SP0165	Filter Push Loudness			Q210ab	TR0329	2SA-1102(or 2SA-1135)		
S108		Tape Dubbing etc.			Q301	TR0320	2SA-992		
Variable Resistor					P.C.B. Fuse Holder				
VR101a	RV0279	200 k Ω Ax2 Volume C			*F201ab	AH0028	23165102-C		S
P.C.B. Board					*F202ab	AH0028	23165102-C		S
PC1324	PB-1324				*F301	AH0028	23165102-C		S
Choke Coil					*F201ab	AH0029	YSH-401T		E
L201ab	LA1004	LUX-1004 2 mH			*F202ab	AH0029	YSH-401T		E
Resistor (Unit: Ω)					*F301	AH0029	YSH-401T		E
R101ab	RB0414	56 K.0.25 W. Rd			Variable Resistor				
R102ab	RB0340	47 0.25 W. Rd			VR201ab	RT0050	500 Idle A.D.J.		
R103ab	RB0444	1 M.0.25 W. Rd			Resistor (Unit: Ω)				
R104ab	RB0436	470 K.0.25 W. Rd			R110ab	RBO410	39 K. 0.25 W. Rd		
R106ad	RB0368	680 K.0.25 W. Rd			R111ab	RBO440	680 K. 0.25 W. Rd		
R107ab	RB0412	47 K.0.25 W. Rd			R112ab	RBO374	1.2 K. 0.25 W. Rd		
R108ad	RB0370	820 0.25 W. Rd			R113ab	RBO394	8.2 K. 0.25 W. Rd		
R109ad	RB0420	100 K.0.25 W. Rd			R114ab	RBO360	330 0.25 W. Rd		
					R115ab	RBO436	470 K. 0.25 W. Rd		
					R116ab	RBO426	180 K. 0.25 W. Rd		
					R117	RBO400	15 K. 0.25 W. Rd		

PARTS LIST(P. C. B.)

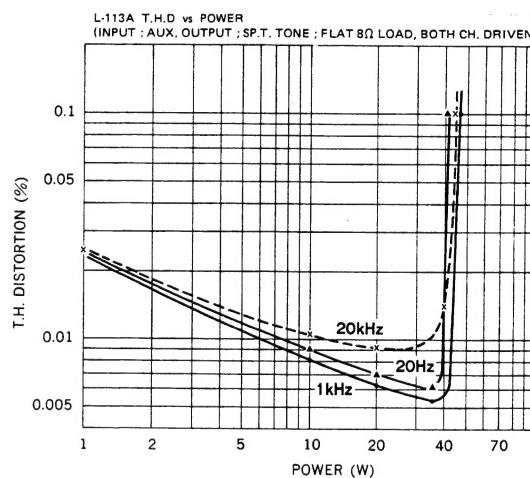
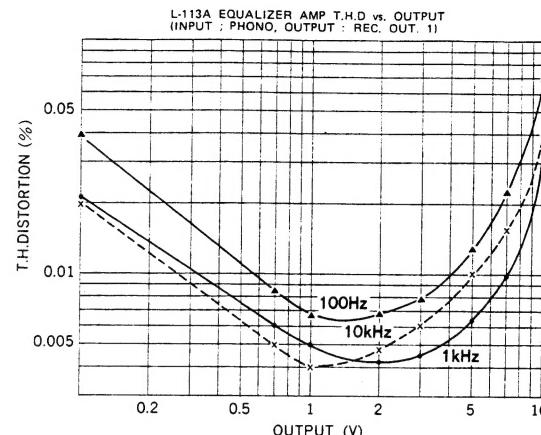
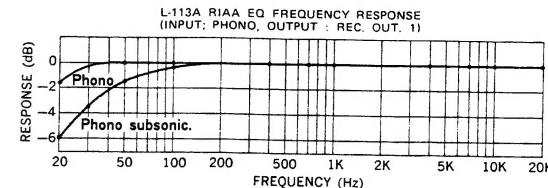
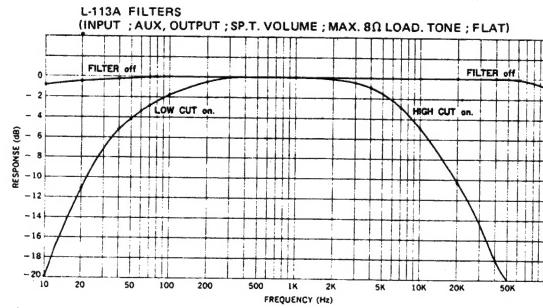
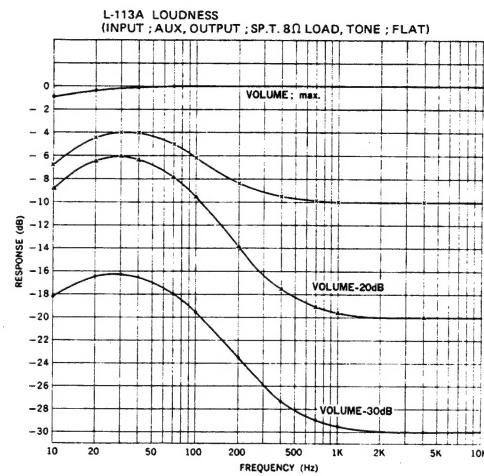
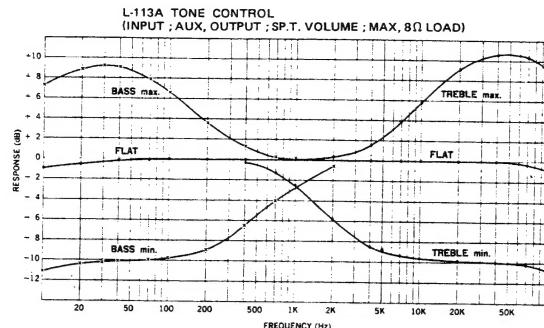
REMARKS

Capacitor: My...Mylar, El...Electrolytic, St...Styrol, Ce...Ceramic
 Mi...Mica, Ta...Tantalum, Lp...Line pass (AC Cap.)
 Tm...Trimmer, Ac...AC Capacitor, Fi...Film Cap.
 Resistor: Rd...Carbon, Rc...Cement Rm...Metal Film, Rf...Flame proof
 Ro...Oxid Metal,
 +5%, 0,25W, unless specified otherwise.

PB-1324... Equalizer Power Amp



STANDARD CURVES

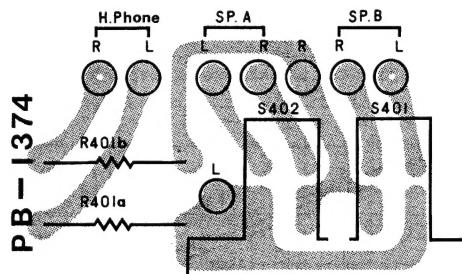


SPECIFICATIONS

Power Output:	40 W minimum continuous per channel both channels driven into 8 ohms with no more than 0.02% total harmonic distortion.		
Rated I.M.:	no more than 0.02% (8 ohms, 40 W/ch, 60 Hz: 7kHz = 4 : 1)		
Frequency Response	30 Hz ~ 20 kHz (± 0.5 dB)—PHONO		
Input Sensitivity & Input Impedance:	PHONO	2.2 mV	50 k ohms
	TUNER	130 mV	70 k ohms
	AUX	130 mV	70 k ohms
	MONITOR	130 mV	70 k ohms
Signal-to-Noise Ratio: (input short-circuited)	PHONO	better than 93 dB (IHF-A weighted, 10 mV)	
	TUNER	better than 100 dB (IHF-A weighted)	
	MONITOR	better than 100 dB (IHF-A weighted)	
Residual Noise:	no more than 0.5 mV		
Tone Control:	Bass	+ 8 dB - 10 dB at 70 Hz	
	Treble	+ 8 dB - 10 dB at 14 kHz	
Filter:	High Cut	7 kHz (-6 dB/oct.)	
	Phono-Subsonic	30 Hz (-6 dB/oct.)	
	Low Cut	70 Hz (-6 dB/oct.)	
Dimensions:	438 (W) x 306 (D) x 84 (H) mm (17-1/4" x 12-1/16" x 3-11/32")		
Weight:	Net	7.5 kgs (16.5 lbs.)	
	Gross	8.5 kgs (18.7 lbs.)	

SYMBOL NO	STOCK NO	DESCRIPTION	REMARK	SYMBOL NO	STOCK NO	DESCRIPTION	REMARK
Resistor (Unit: Ω)							
R118	RB0410	39 K.0.25 W.	Rd	R212ab	RB0378	1.8 K.0.25 W.	Rd
R119	RS1281	100 0.33 W.	Rf	R213ab	RB0364	470 0.25 W.	Rd
R120ab	RB0444	1 M.0.25 W.	Rd	R214ab	RS2512L	100 0.5 W.	Ro
R121ab	RB0444	1 M.0.25 W.	Rd	R215ab	RS2512L	100 0.5 W.	Ro
R122ab	RB0424	150 K.0.25 W.	Rd	R216ab	RG0090	0.33 2 W.	Rc
R123ab	RB0424	150 K.0.25 W.	Rd	R217ab	RS2510L	68 0.5 W.	Ro
R124ab	RB0444	1 M.0.25 W.	Rd	R218ab	RS2501L	10 0.5 W.	Ro
R125ab	RB0444	1 M.0.25 W.	Rd	R219ab	RS2709L	10 1 W	Ro
R126ab	RB0392	6.8 K.0.25 W.	Rd	R220ab	RS2526L	1.5 K.0.5W.	Ro
R127ab	RB0392	6.8 K.0.25 W.	Rd	R221ab	RB0412	447 K.0.25 W.	Rd
R128ab	RB0398	12 K.0.25 W.	Rd	R222ab	RB0394	8.2 K.0.25 W.	Rd
R201ab	RB0372	1 K.0.25 W.	Rd	R223ab	Rb0362	390 0.25 W.	Rd
R202ab	RB0414	56 K.0.25 W.	Rd	R224ab	RB0394	8.2 K.0.25 W.	Rd
R203ab	RB0396	10 K.0.25 W.	Rd	R225ab	RB0376	1.5 K.0.25 W.	Rd
R204ab	RB0356	220 0.25 W.	Rd	R226ab	RB0378	1.8 K.0.25 W.	Rd
R207ab	RB0356	220 0.25 W.	Rd	R227ab	RB0360	330 0.25 W.	Rd
R208ab	RB0374	1.2 K.0.25 W.	Rd	R303	RS2512L	100 0.5 W.	Ro
R209ab	RS2526L	1.5 K.0.5 W.	Ro	R304	RB0416	68 K.0.25 W.	Rd
R210ab	RB0382	2.7 K.0.25 W.	Rd	R305	RB0372	1 K.0.25 W.	Rd
R211ab	RB0390	5.6 K.0.25 W.	Rd				

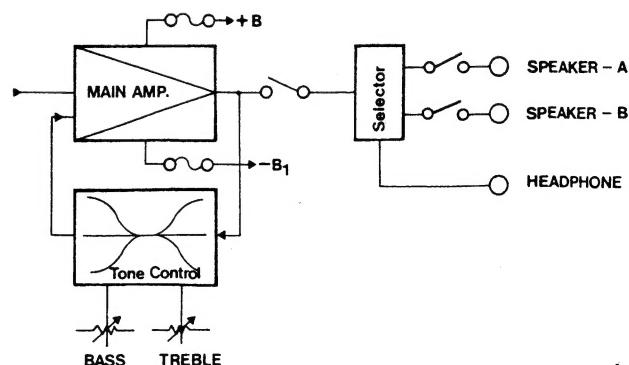
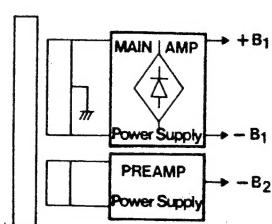
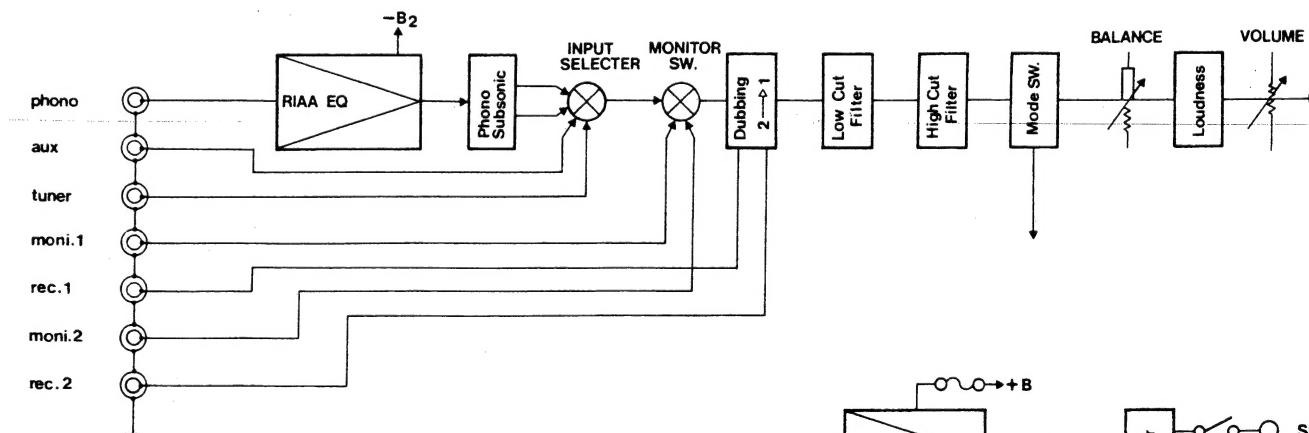
PB-1374 Speaker Selector

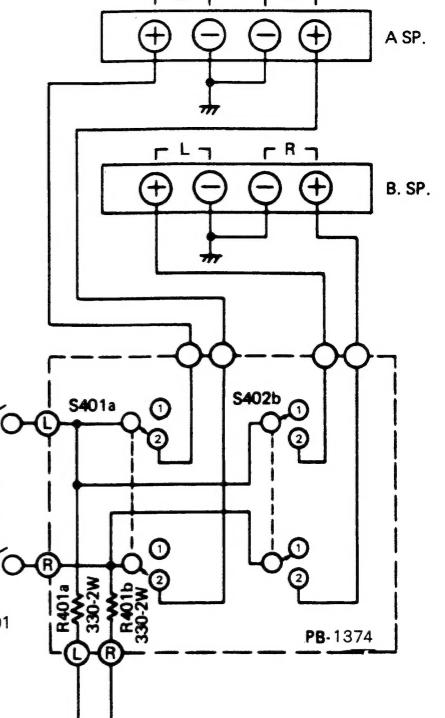
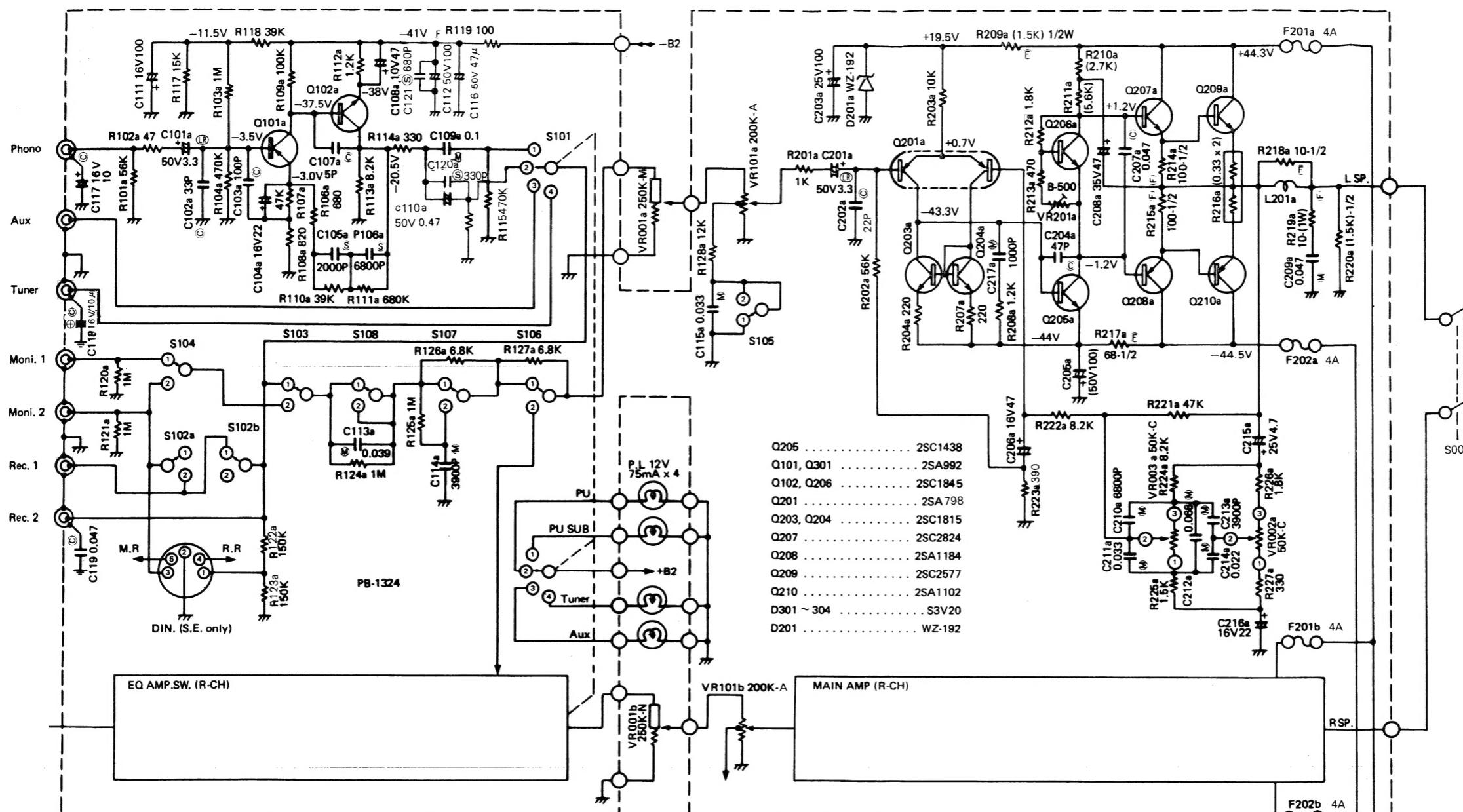


PB-1374 (Speaker Selector)

R401ab	RS0125	300Ω 2 W.	Rf
S401ab	SP0193	Push Switch	
S402ab	PC1374	SUF22S23	
		P.C.B. Board	
		PB-1374	

BLOCK DIAGRAMME





S001 : POWER SW
S101 : FUNCTION SW
 1 phono subsonic 2 phono
 3 aux 4 tuner
S102 : DUBBING SW.
 1 off 2 2 → 1
S103 : MONITOR SW.
 1 source 2 moni.
S104 : MONITOR SW.
 1 moni. 1 2 moni. 2
S105 : LOUDNESS SW.
 1 off 2 on
S106 : MODE SW.
 1 stereo 2 mono
S107 : HIGH CUT FILTER
 1 off 2 7 KHZ
S108 : LOW CUT FILTER
 1 off 2 70 HZ
S401 : A SPEAKER SW.
 1 off 2 on
S402 : B SPEAKER SW.
 1 off 2 on

L-113A

NOTES

1. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE IN OHM 1/4 WATT, ALL CAPACITORS ARE IN MICRO FARAD.
2. TRANSISTORS AND DIODES MAY BE REPLACED WITH ANY TYPE HAVING COMPARABLE RATINGS.
3. DUE TO CONTINUED IMPROVEMENTS LUX RESERVE THE RIGHT TO ALTER THE CIRCUIT OR SPECIFICATION.